

REMARKS/ARGUMENTS

Claims 1-15, 17-27 and 29-34 are pending in this application. By this Amendment, claims 1, 5, 12, 17, 19, 22 and 24-25 are amended and claim 27 is canceled without prejudice or disclaimer. Reconsideration in view of the above amendments and the following remarks is respectfully requested.

Entry of the amended claims is proper under 37 C.F.R. §1.116 since the amendments: (1) place the application in condition for allowance (for the reasons discussed herein); (2) do not raise any new issues requiring further search and/or consideration (since the amendments amplify issues previously discussed throughout prosecution without incorporating additional subject matter); and/or (3) place the application in better form for appeal (if necessary). Entry is thus requested.

A. The Office Action objects to claims 5, 19, 22 and 24 for informalities. Applicants respectfully submit the above amendments obviate the grounds for the objection. Withdrawal of the objection to claims 5, 19, 22 and 24 is respectfully requested.

B. The Office Action rejects claims 1-7, 9-15, 17-30 and 32-34 under 35 U.S.C. §102(e) over U.S. Patent No. 6,684,341 to Malcolm et al. (hereafter "Malcolm"). The rejection is respectfully traversed.

1. With respect to claim 1, Applicants respectfully submit that Malcolm fails to disclose each claimed feature as required under §102. For example, Malcolm fails to disclose at least features of a method for adjusting speed of a CPU including comparing the measured

CPU usage with a predetermined reference CPU usage range and adjusting the speed of the CPU responsive to the comparison when the measured CPU usage is outside the predetermined reference CPU usage range and combinations thereof as recited in claim 1.

In contrast, Applicants respectfully submit that Malcolm discloses a comparison as to the processor speed and the processor utilization whereby when the processor speed is less than the processor utilization, the processor speed is increased by one unit; and when the processor speed is greater than the processor utilization, the processor speed is slowed by one unit. See Figure 6, including steps 606 and 608 and column 7, lines 21-62 of Malcolm. As described with respect to Figure 6, Malcolm discloses using a processor utilization ratio by selecting a one-to-one ratio and percentages of the processor speed and the processor utilization. However, even if a different processor utilization ratio such as a two-to-one ratio is selected, Applicants respectfully submit Malcolm discloses increasing or decreasing the processor speed based on the result of the comparison. See column 7, lines 38-42 of Malcolm.

Further, Applicants respectfully submit Malcolm does not teach or suggest any modification to its disclosure that would result in at least features of a method for adjusting speed of a CPU including measuring, comparing and adjusting the speed of the CPU responsive to the comparison when the measured CPU usage is outside the predetermined reference CPU usage range and combinations thereof as recited in claim 1. For example, Applicants respectfully submit Malcolm describes using a range from a slowest speed to a fastest speed for the processor. See step 602 and column 7, lines 32-35 of Malcolm. In one embodiment of

Malcolm, power management is set based on an identified program(s) executing on the data processing system. See column 4, lines 45-62 and column 6, lines 34-35 of Malcolm. For example, applications selected (for power management) that are currently initialized/executing are determined and a processor speed is set to the fastest speed identified for all the selected applications. See Figure 4 and column 6, lines 34-46. In another embodiment, applications selected for power management and each corresponding processor speed can be selected by a user, for example, using a GUI. See Figure 5 and column 6, line 57-column 7, line 20 of Malcolm. Accordingly, Applicants respectfully submit that Malcolm teaches away from such combinations of features recited in claim 1.

2. With respect to claim 24, Applicants respectfully submit Malcolm does not teach or suggest at least features of comparing, and adjusting, wherein if the measured CPU usage is between lower and upper reference CPU usages of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maintaining current CPU speed and combinations thereof as recited in claim 24. Applicants respectfully submit Malcolm does not disclose a predetermined reference CPU usage range. Further, Malcolm does not disclose wherein if the measured CPU usage is between lower and upper reference CPU usages of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maintaining current CPU speed.

In contrast, Malcolm discloses the processor speed will be adjusted by one unit up or down. See Figure 6, steps 604, 606, 608 and column 2, lines 16-24 and column 5, lines 56-65 of

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Malcolm. Further, Applicants respectfully submit that Malcolm does not disclose any modification to its disclosure that would result in at least features of comparing and adjusting and combinations thereof as recited in claim 24.

3. With respect to claim 25, Applicants respectfully submit that Malcolm does not disclose at least a method for controlling a performance state of a CPU including comparing the measured CPU usage with a predetermined reference CPU usage range, wherein the determination of the CPU performance state comprises changing the performance state to a next lower performance state in a stepwise fashion and combinations thereof as recited. As described above, Applicants respectfully submit that Malcolm does not disclose a predetermined reference CPU usage range. Further, Applicants respectfully submit Malcolm does not teach or suggest at least features of wherein the determination of the CPU performance state comprises changing the performance state to a next lower performance state in a stepwise fashion when the measured CPU usage is less than the predetermined reference CPU usage range. Applicants respectfully submit that Malcolm does not disclose any modification to its disclosure that would result in at least features of comparing and combinations thereof as recited in claim 25.

For at least the reasons set forth above, Applicants respectfully submit claims 1, 24 and 25 define patentable subject matter. Claims 12 and 15 define patentable subject matter for at least reasons similar to claims 1 and 24, respectively.

4. With respect to claims 2, 10-11, 20 and 26, Applicants respectfully submit that inputting a processor speed for association to a selected application does not teach or

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suggest at least a feature of a predetermined reference CPU usage range. Further, Malcolm does not teach or suggest modifications to its disclosure that would result in a predetermined reference CPU usage range and combinations thereof as variously recited in claims 2, 10-11, 20 and 26. See column 7, lines 3-10 of Malcolm. See Item 18 of the Office Action.

With respect to claims 5, 21-22 and 28, Applicants respectfully submit that Malcolm does not teach or suggest at least features of wherein if the measured CPU usage is between minimum and maximum reference CPU usages of the predetermined reference CPU usage range, then the adjustment of the CPU speed is carried out by maintaining current CPU speed and combinations thereof as recited in claim 5. In contrast, Applicants respectfully submit Malcolm teaches away from such recited features by "adjusting," in contrast to at least features of "maintaining" and combinations thereof as recited. See Items 20 and 27-28 of the Office Action.

Claims 2-7, 9-11, 13-14, 17-23, 26-30 and 32-34 depend from claims 1, 12, 15 and 24-25, respectively, and therefore also define patentable subject matter for at least that reason as well as their additionally recited features. Claim 27 is canceled without prejudice or disclaimer. Withdrawal of the rejection of claims 1-7, 9-15, 17-30 and 32-34 under §102 is respectfully requested.

C. The Office Action rejects claims 8 and 31 under 35 U.S.C. §103(a) over Malcolm and U.S. Patent No. 6,049,798 to Bishop et al. (hereafter "Bishop"). The rejection is respectfully traversed.

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As described above, Applicants respectfully submit claims 1 and 25 define patentable subject matter over Malcolm. Applicants respectfully submit that Bishop does not teach or suggest at least features of adjusting and combinations thereof as respectively recited in claims 1 and claim 25 and lacking from Malcolm. Thus, Applicants respectfully submit that Malcolm and Bishop, individually or in combination, would not result in at least features of adjusting and combinations thereof as recited in claims 1 and 25, respectively.

For at least the reasons set forth above, Applicants respectfully submit claims 1 and 25 define patentable subject matter. Claims 8 and 31 depend from claims 1 and 25, respectively, and therefore also define patentable subject matter for at least that reason as well as their additionally recited features. Withdrawal of the rejection of claims 8 and 31 under §103 is respectfully requested.

CONCLUSION

In view of the foregoing amendments and remarks, it is respectfully submitted that the application is in condition for allowance. Favorable consideration and prompt allowance are earnestly solicited.

If the Examiner believes that any additional changes would place the application in better condition for allowance, the Examiner is invited to contact the undersigned attorney, **Carl R. Wesolowski**, at the telephone number listed below.

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To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this, concurrent and future replies, including extension of time fees, to Deposit Account 16-0607 and please credit any excess fees to such deposit account.

Respectfully submitted,
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